

The following final and/or proposed listings and regulations have been announced by governmental regulatory agencies. Pertinent *Federal Register* (FR) citations are given for U.S. notices.

U.S.: *Graptemys flavimaculata* (yellow-blotched map turtle); proposed as Threatened [FR 55(133): 28570-28573, 8/11/90]

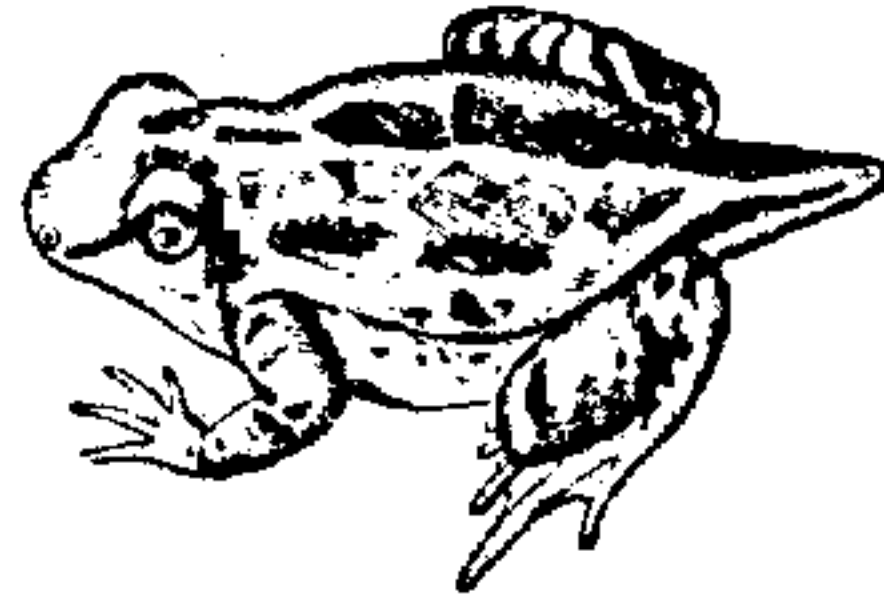
This basking turtle is restricted to the Pascagoula River system in Mississippi, including the Leaf and Chickasawhat Rivers and other tributaries. It is threatened by habitat modification, wanton shooting, collecting, water quality degradation, and nest predation.

MEXICO: The government of Mexico has announced that it is prohibiting the take of sea turtles in its waters and the destruction of turtle nests. Accompanying this decision, the government is: initiating a program to study the magnitude of incidental take of sea turtles during fisheries activities; extending offshore and beach refuge zones; increasing scientific studies aimed at protection and conservation of sea turtles; and registering all existing stockpiles of sea turtle products (Endangered Species Technical Bulletin, Vol XV, No. 7, July 1990).

Florida: *Gopherus polyphemus* (gopher tortoise); incidental take, draft rule

In Florida, where gopher tortoises are listed as a Species of Special Concern, the combined forces of urbanization, residential development, agriculture, forestry, and mining are destroying hundreds of thousands of acres of tortoise habitat annually. Although the state extracts some mitigation for habitat lost to the largest developments, 95% of the loss is unmitigated. The Florida Game and Fresh Water Fish Commission is now drafting rules that would require some habitat mitigation or preservation for tortoise burrows that are destroyed during developmental and agricultural activities (i.e. incidental take). The draft rule will then be presented to the Commission for consideration, perhaps as early as November 1990. As expected, strong resistance to such a rule is being exerted by developmental and agricultural interests. For additional information, contact; Col. Robert M. Brantly, Executive Director, Florida Game and Fresh Water Fish Commission, 620 S. Meridian Street, Tallahassee, FL 32301, USA.

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FEATURES

A CONGENITAL LUNG DISORDER IN A JUVENILE HEAD-STARTED KEMP'S RIDLEY SEA TURTLE (*Lepidochelys kemp*)

Since 1978, the National Marine Fisheries Service (NMFS), Southeast Fisheries Center, Galveston Laboratory, Galveston, TX, has been involved in an effort to save from extinction the most endangered species of sea turtle, Kemp's ridley (*Lepidochelys kemp*). This conservation program is a cooperative venture among Mexico's Instituto Nacional de la Pesca, the U.S. Fish and Wildlife Service, the National Park Service, the Texas Parks and Wildlife Department, and the NMFS. The NMFS husbandry portion of the program is referred to as head starting.

Diseases encountered in the husbandry of the Kemp's ridley sea turtle have been documented by Clary and Leong (1984) and Leong et al. (1989). Leong et al. (1989) reported that some apparently healthy Kemp's ridleys die of no explainable cause during head starting. We report herein the death and necropsy of an outwardly healthy Kemp's ridley with congenital lung defects.

The turtle in question showed no external signs of illness or disease before its death. It apparently was feeding well and its growth appeared normal as compared to others from the same clutch (Table 1). At the time of death, the turtle was 4-1/2 months old, had a mass of 110.5 g, and had a straight-line carapace length of 8.6 cm and a straight-line carapace width of 7.9 cm. Though the turtle was examined for external marks, lesions, or deformities, none was found.

The necropsy proceeded as recommended by Rainey (1981) and Wolke and George (1981). The turtle was placed on its back and the plastron removed by cutting along its margin through the skin and between the marginal and inframarginal scutes. The plastron was then pulled up, the pectoral and pelvic muscles severed, and the plastron removed. Initial examination showed that all major organs were present and appeared to be in the proper position. The lungs, however, were much smaller than expected for a Kemp's ridley sea turtle of this size. Whereas the lungs of a turtle of this size and age normally cover two-thirds of the dorsal body cavity, this turtle's lungs, although normal in length, did not extend more than a few mm beyond the spinal column. The right lung was smaller than the left, and on first observation was thought to be absent. The lungs, although vestigial, were pink in color and contained no fluid.

Kemp's ridley sea turtle hatchlings received for head starting have exhibited a variety of externally manifested congenital birth defects (Leong et al. 1989). It would be expected that corresponding internal defects would be present in such turtles as well. However, the congenital lung problem described herein occurred in a turtle with no outward signs of abnormalities. It seems likely that a reduced lung capacity could supply oxygen to a turtle's tissues only up to a certain size. Once the mass of such a turtle increased beyond this point, pulmonary dysfunction could occur and the turtle would die. We believe that the death in this case was related to the congenital lung defects.

Researchers performing necropsies on apparently healthy specimens of Kemp's ridleys that die in captivity should look closely for internal evidence of abnormalities.

LITERATURE CITED

- Clary, J.C. III and J.K. Leong. 1984. Disease studies aid Kemp's ridley sea turtle head start project. *Herp. Review* 15(3):69-70.
- Leong, J.K., D.L. Smith, D.B. Revera, J.C. Clary III, D.H. Lewis, J.L. Scott, and A.R. DiNuzzo. 1989. Health care and diseases of captive-reared loggerhead and Kemp's ridley sea turtles. In: Caillouet, C.W., Jr. and A.M. Landry, Jr. (eds), *Proceedings of the First International Symposium in Kemp's Ridley Sea Turtle Biology, Conservation and Management*, Texas A & M University Sea Grant College Program,

Table 1. Growth, survival, and health of one clutch* of head started Kemp's ridley sea turtles of the 1985 year-class, and growth of one specimen from the clutch with "sudden hatchling-death syndrome."

Date	"Sudden Hatchling-death" specimen Weight, g	Average Weight, g	Clutch Survival, %	Health, % ^b
8 July 1985	-	16.0	-	-
29 Aug.	47.0	-	-	-
26 Sept.	-	-	100.0	100.0
23 Oct.	-	120.8	100.0	98.9
1 Nov.	110.5	-	-	-
20 Nov.	-	171.7	97.8	98.9

a) All these turtles were from clutch 6 collected as eggs from the beach near Rancho Nuevo, Tamaulipas, Mexico.

b) Indicates the percentage of turtles in the clutch that were not being treated for a pathological problem. In most instances, the treatable pathological problems are minor skin lesions of the flippers and neck.

College Station, TX.
 Rainey, William E. 1981. Guide to Sea Turtle Visceral Anatomy. NOAA Technical Memorandum NMFS-SEFC-82.
 Wolke, R.E. and A. George. 1981. Sea Turtle Necropsy Manual. NOAA Technical Memorandum, NMFS-SEFC-24.

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OBSERVATIONS ON THE LIZARD *Shinisaurus crocodilurus* IN CAPTIVITY

The Chinese crocodile lizard (*Shinisaurus crocodilurus* Ahl, 1930) has been considered rare and enigmatic since its first description, with few specimens reaching western museums or zoos until 1984 (Wilke 1985). Most of our knowledge of this lizard was based on field notes of the original collector (Fan 1931) and on anatomical studies on very few specimens (cited in Hu et al. 1984). The taxonomic status of this lizard is uncertain with placement either in Xenosauridae (McDowell and Bogert 1954) or in Shinisauridae (Ahl 1930; Hu et al. 1984; Wilke and Huang 1986).

Recently, Shen and Li (1982) described feeding, reproduction, and other behavior of this species in the wild. Wilke (1985) reported on captive specimens, especially housing conditions and feeding problems. Sprackland (1989) provided many observations on feeding, sexual dimorphism, behavior, and captive births. The present note provides additional observations on the Chinese crocodile lizard.

A female *Shinisaurus* (15 cm SVL) was purchased from a local petshop 25 July 1989. It was maintained in a commercial 55 gallon glass aquarium (91 x 43 x 30 cm). The tank was propped 2 cm from the horizontal at one end, such that tap water (allowed to stand at room temperature for 2-5 days) formed a pool (1-2 l) ca. 3 cm at the deep end. The dry floor area was ca.

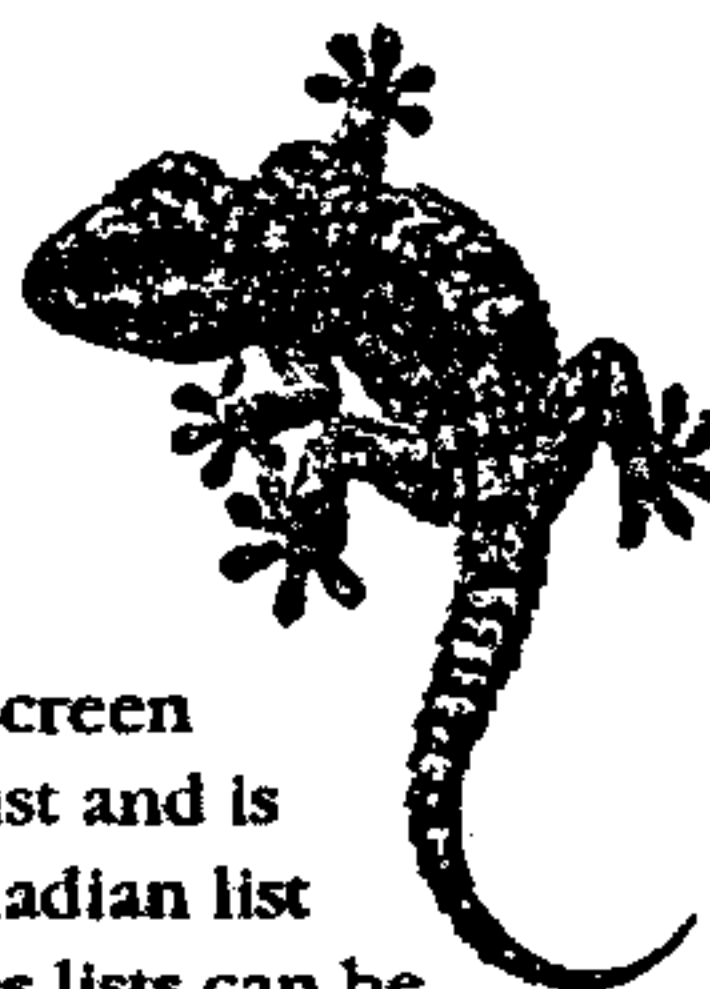
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